DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

Computer Programs Released as U.S. Geological Survey Open-File Reports as of December 1985

by

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Open-File Report 86-172

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Reston, VA

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CONTENTS

	Page
INTRODUCTION	1
REFERENCE LIST	2
AUTHOR INDEX	20
PROGRAM NAME INDEX	24
SUBJECT INDEX	26

INTRODUCTION

This report supersedes U.S. Geological Survey (USGS) Open-File Report (OFR) 82-817; it is a listing of citations of USGS open-filed computer programs, cataloged by unofficial OFR number (for reports issued through April 1974) and by official OFR number (for reports issued after numbering began in May 1974). Both kinds of OFR numbers are used for identification purposes by the Open-File Services Section.

Included with the list are author, subject, and computer-program name (acronym) indexes. In constructing the subject index, copies of those Open-File Reports whose titles were unclear or not descriptive were consulted. This indexed source of reference information opens an avenue of communication between computer-program authors and users and eliminates the need for the personal contact networks heavily relied upon by USGS personnel searching for computer programs. Expected long-term benefits include more efficient use of computers, increased computer program documentation, and development of computer programs in response to feedback from users.

The OFR references were selected from three sources, depending on their release date. USGS reports and maps released in the Open Files between 1949 and 1974 are cited in a series of 25 USGS Circulars. Beginning in 1974, OFR citations have been listed in the annual catalogs, PUBLICATIONS OF THE GEOLOGICAL SURVEY. The most recent OFR's are cited in the monthly lists, NEW PUBLICATIONS OF THE GEOLOGICAL SURVEY. Records of approved OFR's were used as a check against omissions and errors.

Effort was made to include all available, but especially the most recent, OFR's that contain computer programs. Other computer-related OFR's, such as those concerning data-base operations, have been omitted from this list. Most of the data-base materials are described in USGS Circular 817, SCIENTIFIC AND TECHNICAL, SPATIAL, AND BIBLIOGRAPHIC DATA BASES OF THE U.S. GEOLOGICAL SURVEY, 1983.

The OFR's listed may be purchased prepaid from the Open-File Services Section, Branch of Distribution, U.S. Geological Survey, Box 25425, Denver Federal Center, Denver, CO 80225 (Telephone: (303) 236-7476, FTS 776-7476). The price given in each OFR citation is for a single paper copy as of December 1985. In many cases microfiche copies are also available.

Please direct all correspondence concerning the list, including additions and corrections, to the USGS, 907 National Center, Reston, VA 22092 (Telephone: (703) 648-4383, FTS 959-4383).

REFERENCE LIST
(OFR number, TITLE, Author(s), pages, paper copy price)

65-52 COMPUTER SIMULATION PROGRAM FOR INVESTIGATION OF GEOCHEMICAL SAMPLING PROBLEMS, R. N. Eicher and A. T. Miesch, 48p. $10.25.

67-15 A COMPUTER PROGRAM FOR PROCESSING ELECTRON MICROPROBE DATA, M. H. Beeson, 10p. $6.25.

67-187 DEVELOPMENT OF COMPUTER PROGRAMS FOR ANALYSIS OF LUNAR GEOPHYSICAL SURVEY DATA, R. D. Regen and J. L. Herskovits, 24p. $3.50.

69-10 COMPUTER CONTRIBUTION NUMBER 1, WEIGHTED TRIANGULATION ADJUSTMENT, W. L. Anderson, 52p. $8.00.

69-85 **HYPOLAYR**, A COMPUTER PROGRAM FOR DETERMINING HYPOCENTERS OF LOCAL EARTHQUAKES IN AN EARTH CONSISTING OF UNIFORM FLAT LAYERS OVER A HALFSPACE, J. P. Eaton, 106p. $21.50.

70-112 COMPUTER CONTRIBUTION NUMBER 4. HOT PIPE, P. C. Doherty, 63p. $9.75.

70-159 COMPUTER CONTRIBUTION NUMBER 3, NONCONSTANT VARIANCE REGRESSION ANALYSIS PROGRAM, M. S. Hellmann, 106p. $16.50.

70-209 COMPUTER CONTRIBUTION NUMBER 2, PERSPECTIVE CENTER DETERMINATION, J. D. McLaurin, 41p. $6.25.

71-277 LINEAR COMBINATION READING PROGRAM FOR CAPTURE GAMMA RAYS, A. B. Tanner, 9p. $1.00.

72-224 **HYPO71** — A COMPUTER PROGRAM FOR DETERMINING HYPOCENTER MAGNITUDE AND FIRST MOTION PATTERN OF LOCAL EARTHQUAKES, W. H. K. Lee and J. C. Lahr, 100p. $15.25.

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75-110 COMPUTER PROGRAM DESIGNED TO COMPUTE OIL SHALE THICKNESS (FT.), AVERAGE VALUE (GAL. PER TON), AND RESOURCE (BARRELS PER ACRE) FROM FISCHER ASSAY DATA, George VanTrump, Jr., and J. K. Pitman, 18p. $2.75.

75-127 A PROGRAM FOR MASS SPECTROMETER CONTROL AND DATA PROCESSING ANALYSES IN ISOTOPE GEOLOGY - WRITTEN IN BASIC FOR AN 8K NOVA 1120 COMPUTER, J. S. Stacey and J. Hope, 48p. $6.50.

75-131 COMPUTER PROGRAM TO SIMULATE THE SALT BALANCE BETWEEN THE NORTH AND SOUTH PARTS OF GREAT SALT LAKE, UTAH, K. M. Waddell and E. L. Bolke, 22p. $2.50.

75-159 A FORTRAN IV PROGRAM FOR ANALYTIC CONTINUATION OF VLF ELECTROMAGNETIC DATA, R. D. Watts, 28p. $4.25.

75-311 **HYPO71** (REVISED): A COMPUTER PROGRAM FOR DETERMINING HYPOCENTER, MAGNITUDE, AND FIRST MOTION PATTERN OF LOCAL EARTHQUAKES, W. H. K. Lee and J. C. Lahr, 59p. $17.25.

75-317 A GENERAL PURPOSE CONTOURING SYSTEM, G. I. Evenden, 108p. $16.25.

75-341 COMPUTER PROGRAM DESIGNED TO DRAW BAR GRAPHS FROM OIL SHALE FISCHER ASSAY OR SALINE MINERAL DATA, George VanTrump, Jr., and J. K. Pitman, 8p. $1.25.

75-489 GENERAL DATA-PLOT PROGRAM FOR HEWLETT PACKARD 9830 CALCULATOR, H. H. Stevens, Jr., and T. N. Keefer, 16p. $2.00.

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76-407 LABORATORY MANUAL - MINERAL X-RAY DIFFRACTION DATA RETRIEVAL/ PLOT COMPUTER PROGRAM, P. L. Hauff and George VanTrump, Jr., 55p. $8.25.

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AUTHOR INDEX

("s" denotes secondary authorship)

Author	OFR
Ackermann, H.D.	82-1065
	83-604
Adam, D.P.	76-216
Alminas, H.V.	78-1013
	78-1014s
Anderson, W.L.	69-10
	79-240
	79-586
	79-590
	79-773
	79-1432
	80-901
	80-1073
	80-1158s
	81-1309
	82-68
	82-224
	82-378
	82-1064
	82-1129
	83-320
	84-348
	84-514
	85-270
Askew, Bonny	83-248
Astrue, M.C.	83-319
Balay, R.H.	84-275s
Ball, J.W.	81-1183
Beeson, M.H.	67-15
Bender, Bernice	82-293
	82-999
Bigelow, R.C.	82-963
Bisdorf, R.J.	80-806
Black, D.F.B.	80-353
Blake, Dorsey	82-939
Blakely, R.J.	77-784
	81-298
	83-241s
Blank, H.R.	84-849s
Bolke, E.L.	75-131s
Botbol, J.M.	78-865s
Bowen, R.W.	79-1211
Boyce, E.G., Jr.	83-155
	84-651
Bradley, Jerry	83-249
Brice, J.J., III	84-478
Bridges, N.J.	85-112
Buland, Ray	81-666s
Byerlee, J.D.	78-125s
Campbell, D.L.	77-459
	78-815
	83-154
Cantrell, M.W.	81-1183s
Carey, M.A.	82-291s
	82-402s
Carlson, C.A.	82-623
	82-624
	85-103s
	85-104
	85-105
Carter, M.D.	82-291s
Caruso, V.M.	80-353s
Chen, A.T.F.	76-608
	79-1463
	84-290
	85-468
Christiansen, E.H.	84-123s
Chuchel, B.A.	85-233A
	85-233B
Clark, A.L.	78-865s
Clisham, T.J.	79-1521
Cockerham, Rob	81-110s
Colman, S.M.	80-844
Commeau, R.F.	85-455
Condon, S.M.	80-939
Connor, C.W.	83-605
Converse, April	79-289
	84-525
Cooper, A.K.	74-1017
	78-288s
Crane, G.R.	83-518s
	85-368
Crovelli, R.A.	84-275
Crowley, S.S.	81-563
	81-1225s
	82-402s
	83-617s
Crownover, L.M.	80-1259s
Cullip, R.J.	80-317s
Cutler, Reese	83-521s
	85-243s
Daniels, J.J.	77-153

Author	OFR
Dansereau, D.A.	82-1065s
	83-604s
Davis, J.R.	78-907
Dawson, P.B.	85-243
Dean, V.C.	79-865s
Delaney, P.T.	84-690s
	85-107
Dodd, J.E.	85-455s
Doe, B.R.	80-1088s
Doell, R.R.	78-321s
Doherty, P.C.	70-112
Donzeau, M.A.M.	80-127
	80-137
	80-1275
	81-761
	81-1152
Duval, J.S.	84-218
	85-359
Dyman, T.S.	81-29s
	81-240s
Eaton, Jerry	69-85
	81-110
Eicher, R.N.	65-52
El Kahwagy, A.S.M.	81-160
Endo, E.T.	85-279
Evans, J.R.	81-1091
	83-521
	85-243s
Evenden, G.I.	75-317
	76-306
	82-379
Evernden, J.F.	80-1236
Faust, C.R.	76-689s
Fitterman, D.V.	73-1607
	81-360
	81-361
	82-470
Freeborn, W.P.	85-257
Frenzel, P.	80-421s
Frischknecht, Frank	83-240s
Gardner, J.V.	78-288s
German, Peter	82-726
Gettings, M.E.	80-1275s
	81-761s
	81-1152s
Globerman, B.R.	81-125
Godson, R.H.	74-1039
	82-797
	83-345
	83-346

Author	OFR
Goff, F.E.	77-351
Grogan, D.R.	79-1521s
Grauch, V.J.S.	84-501
Hanley, J.T.	78-550
	83-424
	85-40
Harrach, G.H.	80-1274
Harwood, D.S.	78-321s
Hasbrouck, W.P.	79-242
	80-668
	80-669
	80-670
	83-341
	83-348
	83-350
	84-175
	84-334
	85-226
Hauff, P.L.	76-404s
	76-407
	77-53s
	82-177s
Haxel, Gordon	82-898
Hearne, G.	80-421s
Hellmann, M.S.	70-159
Herriot, J.	78-700
Herskovits, J.L.	67-187s
Hessel, P.J.	81-240
Hildenbrand, T.G.	83-237
Hobson, Jeffrey	80-610s
Holzhausen, G.R.	78-160s
Hope, J.	75-127s
Hopson, J.T.	81-1167s
Huebner, J.S.	81-1324
	83-713
	85-257s
Hunter, J.F.	81-1225
Iwatsubo, G.Y.	85-279s
Jachens, R.C.	81-574
Jackson, M.D.	85-107s
Jenne, E.A.	81-1183s
Johnson, Carl	82-726s
Joyner, W.B.	77-671
	78-287
Kane, J.S.	79-282
Kauahikaua, J.P.	79-773s
	80-1158
	80-1159
Keefer, T.N.	75-489s

Author	OFR
Keith, L. A.	84-690
Kirby, W.	80-4
Klein, F.W.	78-694
	78-726
	80-827
	83-621
	84-255
Koch, R.D.	80-1139
Kork, J.O.	81-183
	83-492
Krohn, K.K.	82-291
Lahr, J.C.	72-224s
	75-311s
	75-599
	79-431
	80-59
	80-375
	84-519
Landis, G.P.	83-842
Lanfear, K.J.	81-316
Larsen, B.R.	78-288
Lee, W.H.K.	72-224
	75-311
	83-319s
	83-518
Lockner, D.A.	78-125
Lorens, J.A.	82-430
Ludwig, K.R.	79-722
	79-949
	79-1434
	79-1641
	79-1692
	82-385
	82-386
	82-820
	82-1079
	83-849
	84-113
	85-141
	85-142
	85-513
	85-547
Mackie, R.L.	82-821
Maddock, Thomas, III	75-612
Marcus, P.	77-130
Mark, R.K.	78-321
	78-1069
	81-513
McCammon, R.B.	78-865
	81-556s
	82-843s
	83-804
McGee, E.S.	85-257s
McGee, K.A.	79-276
	79-946

Author	OFR
McGee, J.J.	83-817
McGuire, R.K.	76-67
	78-1007
McHendrie, G.A.	78-288s
McHugh, C.	81-1172
McHugh, Stuart	76-484
	76-578
McLaurin, J.D.	70-209
Medlin, A.L.	81-563s
	81-1225s
	82-291s
Mercer, J.W.	76-689s
Miesch, A.T.	65-52s
Miller, J.J.	82-744
Miller, R.J.	80-1139s
Moody, D.W.	72-259
Moring, Barry	85-103s
	85-104s
Newman, E.B.	78-321s
	81-513s
North, L.D.	79-1211s
	81-761s
Nowack, Robert	80-306
Odell, John	79-1211s
Olhoeft, G.R.	78-876
Olson, A.C.	78-865s
	80-228
O'Neill, M.E.	85-368s
Page, R.A.	83-319s
Pankratz, L.W.	82-1065s
	83-604s
Paskevich, V.F.	81-1167s
Pelton, J.R.	83-319s
Perkins, D.M.	82-293s
Perry, W.J., Jr.	81-158
Phillips, J.D.	79-367
Phillips, R.E.	82-177
Pitman, J.K.	75-110s
	75-341s
	75-524s
Plouff, Donald	77-535
Pollard, D.D.	78-160
Poore, R.Z.	80-317s
Poppe, L.J.	85-455s
Posson, D.R.	80-421
Powers, P.S.	84-827s
	85-509s
Raab, P.V	83-240
	83-249s
	83-461
Rait, Norma	80-2015
Rapp, J.B.	84-415
Rapport, A.L.	82-308
Rashad, S.M.	84-849s
Reasenberg, Paul	78-201
	80-610

Author	OFR
Regan, R.D.	67-187
Reimer, G.M.	79-865
Ridgley, Jennie	78-875
Riley, D.C.	73-235
Roberts, C.W.	81-574s
Robinson, S.	77-130s
Sadek, H.S.	83-485
	84-849
Saltus, R.W.	83-241
Samuels, W.B.	81-316s
Sanford, R.F.	85-101
Sato, M.	79-276s
Sawatzky, D.L.	80-1259
	85-231
Sawyer, M.B.	77-580
Savage, W.Z.	84-827s
Scharre, D.L.	83-518s
Schnabel, R.W.	78-875s
Schneider, G.B.	82-402
Schruben, P.G.	83-424s
	85-40
Scott, J.H.	77-365
	77-366
	78-515
	78-669
Scott, W.A.	81-556
	82-217
	82-843s
	83-617
Sinding-Larsen, R.	78-865s
Singer, D.A.	85-590
Smith, B.D.	84-514s
Smith, E.	77-130s
Smith, R.J.	81-563s
Smith, W.K.	82-489
Spicer, R.A.	80-317
Stacey, J.S.	75-127
Steele, W.C.	76-605
Steppe, J.A.	76-342
Stevens, H.H., Jr.	75-489
Stevenson, P.R.	79-205
	81-829
	81-830
Stuckless, J.S.	79-949s
	79-1237
	83-913
	83-923
	84-8
	84-123
Swolfs, H.S.	84-827s
	85-509
Tanner, A.B.	71-277
Thomas, C.P.	78-982
Topinka, L.J.	85-279s
Tracy, J.V.	80-421s
Turner, R.M.	81-556s
	82-843
	83-155s
USGS	84-267
	84-522
VanTrump, George, Jr.	75-110
	75-341
	75-524
	76-404
	76-407s
	76-867s
	77-53
	78-1013s
	78-1014
	79-1237s
Waddell, K.M.	75-131
Wagini, Alexander	85-377
Ward, P.L.	83-807A
Washburne, J.C.	83-198
Watson, Ken	82-986
Watts, R.D.	75-159
	76-867
	78-815s
	82-831
Webring, M.W.	81-1224
	82-797s
	85-122
Weeks, J.D.	78-125s
Weiss, Emanuel	82-447
Wells, R.B.	76-689
Weston, S.T.	81-29
Wilcox, L.A.	81-240s
Wong, A.	77-130s
Wright, E.L.	81-1167
Wright, J.E.	82-898s
Zartman, R.E.	80-1088
Zelt, F.B.	84-790
Zirbes, Madeleine	81-666
Zohdy, A.A.R.	78-424
	80-248

PROGRAM NAME INDEX

Name	OFR
ADEPT	79-367
$ANBA	83-817
AGRAM	84-525
ANALYST	85-141
	85-142
ANORTH	85-103
ARRAY	78-201
BEROQ85	80-1236
BOX-DIAGRAM	82-624
CABFAC	76-216
CALGRAD	84-790
CHEMANAL	80-844
CONTOUR	82-797
CONTUR	81-761
CTRL2D	81-1152
DBATIB	82-1079
DEROCS	77-130
DEVI	79-282
DIFDEC2	85-101
DITT	79-1463
DLAGF0/DLAGF1	83-320
DSKUP	79-1607
ENSTA	85-104
EQPLT	80-827
EVCON	78-201
EXTRACT	76-342
	81-29
FABSTAT	81-158
FENCE	81-183
FFTFIL	83-237
FINDER	85-590
FLOWCHART	82-999
FRISK	78-1007
FWDSOL	84-348
FWDTHZ	85-270
GARNET	80-228
	81-563
	83-617
GARNETAB	83-617
GENADD	80-137
GENDOC	80-127
GEOLAB	78-700
GEOPAC	74-1039
GEOPLOT	83-807A
GNAP	79-1211
	79-1237
GOGEODATA	78-865
GPP3	75-599
GRAVPOLY	83-346
HPLT	78-726
HYP85	85-243
HYPERMAG	83-241
HYPO71	72-224
	75-311
HYPOELLIPSE	79-431
	80-59
	80-375
	84-519
HYPOINVERSE	78-694
HYPOLAYR	69-85
IMSLEXY	80-1073
IMSLPW	79-586
IPFLTR	83-485
ISDS	79-205
ISOCOMP	81-574
ISOPLOT 200	85-513
KRIGING	85-112
LDIGIT	82-843
LOGIC	81-556
LSTRAT	82-939
MAGDEP	74-1017
MAGIC	80-317
MAGPOLY	83-345
MAPLOT	80-306
MARQDCLAG	79-1432
MARQHXY	80-901
MARQLOOPS	79-240
MARQ-TRANS-HCLOOP	79-773
MICROMAG	85-40
MINC	81-1224
MINCLC	85-257
MINCON	81-1324
MIRA	83-424
MODEL	78-550
MQLVEMCPL	80-1158
MQLVTHXYZ	80-1159
muPROSPECTOR	83-804
NAVED	81-1167
NLSOL	82-68
NLSTC0	82-1064
NLSTC1	82-1129
NLSTIP	84-514
OBIP	84-267
PACER	82-217
	82-291
PACER GARNET	83-605

Name	OFR
PACERAB	82-217
PBDAT	84-113
PBDAT200	85-547
PETAL	84-290
POLYGON	85-233A
	85-233B
QPLOT	83-621
RABBIT	77-351
RASO	80-1274
RASSMP	82-623
RDARL4	83-713
REDUC3	77-784
RELA	85-468
REM	78-1014
REMAPP	80-1259
	85-231
RFM	78-1013
RPLOT	81-830
RVT	84-827
SAKI	85-122
SEISRICK II	82-293
SELECT	76-342
	84-255
SETUP	76-342
SIPB	77-366
SIPT	77-365
SOURCE_RX	79-1521
SPDIKE	82-470
SPEKTRA	81-830
SPIKE	85-105
SQJI	82-224
SQUASH	80-375
STATPAC	84-522
STEREO	82-726
TAYLOR	84-501
TCILOOP	81-1309
TCOLOOP	82-378
TECO	82-177
TMPLOT	80-1139
TRANS-HCLOOP	79-590
TRANS-HZWIRE	79-590
VIEW	81-829
VISICALC	83-913
	83-923
WATEQ3	81-1183
WELLMAP	83-155
WILDMAP	84-651
WOLF	82-379
WSPRINT	81-829
XRDPLT	77-53
ZEQPLT	80-827

SUBJECT INDEX

("*" denotes hand calculator program)

Subject	OFR
Coal -	
program for a generic western coal region model	78-321
coal-seismic BASIC programs, part 1: store, plot, and edit array data	79-242
GARNET computer applications software for NCRDS	80-228
coal-seismic BASIC programs, part 4: transfer, edit, and display data	80-668
coal-seismic BASIC programs, part 2: enter, compute, display, edit, and store results	80-669
coal-seismic BASIC programs, part 3: compute, tabulate, and plot normal moveout times	80-670
guide for the calculation of coal resources using **GARNET**	81-563
digitizing procedure for NCRDS	81-1225
PACERAB program to create a file for executing **PACER**	82-217
PACER data retrieval and update system for NCRDS	82-291
application of computer graphics to generate coal resources	82-402
LSTRAT output routine for **USTRAT** NCRDS data file	82-939
coal-seismic BAISC programs, part 6: develop rms velocity functions and apply mute and normal moveout	83-341
coal-seismic BASIC programs, part 7: display and compute shear-pair seismograms	83-348
coal-seismic BASIC programs, part 5: perform X-square T-square analyses and plot normal moveout lines on seismogram overlay	83-350
PACER-GARNET flow chart, novice's guide (NCRDS)	83-605
GARNETAB program to create absentee file to execute **GARNET**	83-617
coal-seismic BASIC programs, part 8: pick first arrivals and align events on screen	84-175
coal-seismic BASIC programs, part 9: compute static corrections using an ABC method applied to 6-fold, 2-way field data	84-334
coal-seismic BASIC programs, part 10: construct and apply 1-dimensional syntheitc seismograms	85-226
Earthquake Studies -	
HYPOLAYR program for determining hypocenters in an earth consisting of uniform flat layers over a half space	69-85
HYPO71 program for determining hypocenter magnitude and first motion pattern	72-224
HYPO71 (revised) program for determining hypocenter, magnitude, and first motion pattern of local earthquakes	75-311
GPP3 hypocenter plotting program user's manual	75-599
FORTRAN program for seismic risk analysis	76-67
SELECT, EXTRACT, SETUP programs for searching and modifying local earthquake data	76-342
HYPOINVERSE hypocenter location program	78-694
GEOLAB program for analysis of low-frequency earthquake precursor data	78-700
HPLT an interactive hypocenter plotting program	78-726
FRISK program for seismic risk analysis using faults as earthquake sources	78-1007
RFM relative fraction magnitude	78-1013
REM relative element magnitude	78-1014
strong-motion information retrieval system user's manual	79-289

Subject OFR

Earthquake Studies (continued) -

HYPOELLIPSE program for determining local hypocentral parameters, magnitude, and first motion pattern 79-431
HYPOELLIPSE/MULTICS program for determining local hypocentral parameters, magnitude, and first motion pattern 80-59
MAPLOT program to construct plots of seismic data 80-306
SQUASH/MULTICS program used with **HYPOELLIPSE** to generate an augmented phase data archive 80-375
digitizing 5-day-recorder tapes on the Eclipse and Unix systems 80-610
EQPLT plotting program for earthquake data 80-827
* **BEROQ35** and others, hypocenter location program (HP85) 80-1236
Cal Net procedures for processing phase data and determining hypocenters of local earthquakes 81-110
network-day tape user guide, global digital seismic network 81-666
WSPRINT/VIEW method for creating small ASCII waveform files on the Eclipse minicomputer 81-829
SPEKTRA/RPLOT how to display seismic amplitude spectra and special ratios on the Eclipse 81-830
earthquake processing on the Eclipse 81-1172
SEISRICK II program for seismic hazard estimation 82-293
STEREO program for projecting and plotting stereograms 82-726
transformation of mapped data to grid systems (earthquake applications) 83-248
manual, 4-film, sonic digitizing table to locate earthquakes 83-319
system for organizing earthquake-related data 83-518
QPLOT interactive plotting - earthquake/geophysical data 83-621
SELECT Vax program for building subsets of earthquake summary data 84-255
PETAL Penetration Testing and Liquefaction 84-290
HYPOELLIPSE/VAX: program for determinging local earthquake hypocentral parameters, magnitude, first motion pattern 84-519
AGRAM processing digitized strong-motion accelerograms 84-525
*computer and calculator programs to determine extension or contraction of faulted marker planes 85-107
HYP85 an earthquake location program for the HP-85 85-243
RELA: Regional Liquefaction Assessment 85-468

General -

nonconstant variance regression analysis program 70-159
program for creating keyword indexes to textual data files 72-259
general data-plot program for HP 9830 calculator 75-489
CABFAC FORTRAN program for Q-mode factor analysis of stratigraphically ordered samples 76-216
general purpose Ansi FORTRAN-IV subroutine for sorting data 76-306
program designed to produce tables from alpha numeric data 78-875
algorithm and program for ordinary least-squares regression 78-876
program for Shapiro-Wilk W test for normality 78-1069
DSKUP on-line operation of disk backup utility program 79-1607
FORTRAN coding of the Lehmer random number generators 80-4
GENDOC general document file program 80-127
GENADD program for adding to general document file 80-137
RASO program for renumbering FORTRAN source programs 80-1274
MINC gridding program based on minimum curvature 81-1224

Subject OFR

General (continued) -
NLSOL (subprogram) adaptive nonlinear least-squares solution for constrained or unconstrained minimization problems 82-68
WOLF automatic typing program 82-379
FORTRAN 77 programs for computing data fitting functions based on a principle of minimum integrated squared curvture 82-831
Radiative transfer from a homogeneous half-space 82-986
FLOWCHART program for plotting flowcharts 82-999
DLAGF0/DLAGF1 fournier cosine and sine transforms using lagged convolutions in double-precision 83-320
modified IBM PC synchronous communications programs (Multics) 83-492
FWDSOL general interface for producing forward solution programs 84-348
STATPAC and related statistical programs for the IBM personal computer 84-522
SPIKE program to plot 3-dimensional data 85-105
KRIGING program to determine the best Linear Unbiased Estimation 85-112

Geochemistry -
Analytical Studies -
program for processing electron microprobe data 67-15
linear combination reading program for capture gamma rays 71-277
program for mass spectrometer control and data processing analyses 75-127
RABBIT electron microprobe data reduction program 77-351
laboratory control system using a microprocessor 78-125
MODEL program for calculating weights and roots of characteristic analysis models 78-550
programs for slope profile analysis 78-907
emission spectographic analysis system 78-982
DEVI program for analysis of analytical data variance 79-282
GNAP graphic normative analysis program 79-1211
revised graphic normative analysis program 79-1237
CHEMANAL program to calculate chemical weathering data 80-844
algorithms for the analysis of variance (rock standards analyzed by emission spectrography) 80-2015
MINCON program to control temperature and oxygen fugacity in furnaces 81-1324
BOX-DIAGRAM user's manual 82-624
interfacing a plasma spectrometer to a minicomputer 82-963
DBATIB program for operations of a mass spectrometer 82-1079
RDARL4 FORTRAN interface for transferring chemical analytical data from an ARL probe to a PDP-11 computing system 83-713
$ANBA a rapid, combined data acquisition and correction program for the SEMQ electron microprobe 83-817
CALGRAD BASIC program for the calibration of gamma-ray spectrometers 84-790
Analyst program for control of an isomass 54E thermal-ionization single-collector mass-spectrometer (user's manual) 85-141
Analyst (see above) program list 85-142
Isotopes -
program for mass spectrometer control and data processing analyses 75-127
solutions for apparent ages and U-Pb isotope ratios of young systems without initial secular equilibrium 79-722

Subject OFR

Geochemistry -
Isotopes (continued) -
program for X-Y plotting and line-fitting of isotopic data 79-1641
program for plotting and processing U-Pb isotope data on concordia diagrams 79-1692
program for plumbotectonics (lead isotope modeling) 80-1088
programs for filing and X-Y plotting of isotopic data 82-385
programs for filing and plotting U-Pb isotope data for concordia diagrams 82-386
program to convert raw Pb-U-Th isotope ratios to blank-corrected ratios and concentrations 82-820
*U-Pb concordia-disconcordia intercepts program (TI-59) 82-898
program in HPL for acquisition and reduction of stable isotope data using a HP 9825A desktop computer 83-842
plotting and regression programs for isotope geochemists, for use with HP-86/87 microcomputers 83-849
PBDAT program for reduction of Pb-U-Th isotope data, for use with HP-86/87 microcomputers 84-113
program for calculating and plotting U-Pb concordia-discordia intercepts using the HP series 80 and the HP-7470A 84-478
DIFDEC2 a BASIC program for calculating production, diffusion and reaction of 2-components in a tabular layer 85-101
ISOPLOT 200 plotting and regression program for isotope geochemists, for use with HP series 200 computers 85-513
PBDAT200 program for processing raw Pb-U-Th isotope data 85-547
Other -
program for investigation of geochemical sampling problems 65-52
hot pipe, thermal history program - permafrost cross section 70-112
program for the calculation of grain size statistics 77-580
program to contour and plot data from helium surveys 79-865
program for storing, retrieving, and plotting rare-earth element data for geochemical studies 79-949
program for creating, editing, and printing out data files for geochemical applications 79-1434
SOURCE_RX program for stratigraphic and petroleum geochemical data 79-1521
documentation and program listing for a plot package using petrochemical data 81-125
FENCE program to create files and construct fence sections of borehole data 81-183
LOGIC computer graphic program to construct integrated logic circuits for genetic-geologic (uranium) models 81-556
WATEQ3 geochemical model with uranium added 81-1183
program to compute chemical geothermometers for fluids 82-308
* programs to calculate CIPW norms (TI-59) 82-821
program in HP BASIC for calculations of CIPW normative minerals using HP-Series 80 computers and **VISICALC** 83-913
BASIC program for calculation of Mesanormative minerals using HP-Series 80 and **VISICALC** 83-923
BASIC program for plotting geochemical data on ternary diagrams using HP-Series 80 84-8

Subject OFR

Geochemistry -
Other (continued) -
BASIC program for plotting rare-earth element diagrams using HP-Series 80 84-123
program or geochemical correlation studies 84-415
program for calculating and plotting U-Pb concordia-discordia intercepts using the HP series 80 and the HP-7470A 84-478
FORTRAN programs for properties of water and steam, and solubilities of solid silica phases 84-690
DIFDEC2 BASIC program for calculating production, diffusion, and reaction of 2-components in a tabular layer 85-101
ENSTA program to calculate orthopyroxene compositions from x-ray data 85-104
FORTRAN programs for the reduction of atmospheric data collected along EDM survey lines 85-279

Geophysics -
Density -
program for borehole compensation of dual-detector density well logs 78-515
Electricity/Electromagnetism -
program to calculate resistivity and induced polarization response 77-153
* procedures and methods (with programs) for total field resistivity surveys (HP 97-67) 78-424
algorithm for correcting normal resistivity logs 78-669
MARQLOOPS Marquardt inversion of loop-loop frequency soundings 79-240
IMSLPW Marquardt inversion of plane-wave frequency soundings 79-586
TRANS-HCLOOP program to calculate transient horizontal coplanar loop soundings 79-590
TRANS-HZWIRE program to calculate transient wire-loop soundings 79-590
MARQ-TRANS-HCLOOP Marquardt inversion of transient horizontal coplanar loop soundings 79-773
MARQDCLAG Marquardt inversion of D.C. Schlumberger soundings 79-1432
program for computing and plotting full Schlumberger sounding curves and master sets 80-248
programs to compute Hankel transforms using convolution 80-806
MARQHXY Marquardt inversion of H_x and H_y frequency soundings 80-901
IMSLEXY Marquardt inversion of E_x and E_y frequency soundings 80-1073
MQLVEMCPL Marquardt inversion of electromagnetic coupling data 80-1158
* program for computation of Schlumberger resistivity sounding curves (TI59) 81-160
TCILOOP transient soundings, central induction loop system 81-1309
SQJI fast evaluation of squared-Hankel transforms of order-1 by linear digital filtering 82-224
TCOLOOP transient soundings for a coincident loop system 82-378
SPDIKE program for calculation of self-potential anomalies near vertical dikes 82-470
NLSTCO nonlinear least-squares inversion of transient soundings for a coincident loop system 82-1064

Subject OFR

Geophysics -
Electricity/Electromagnetism (continued) -
NLSTCI nonlinear least-squares inversion of transient soundings for a central induction loop system 82-1129
HP 9845A program to invert complex resistivity data 83-198
desktop processing of coincident and central loop time domain electromagnetic data 83-240
Sirotem II IEEE 488-1978 interface and controlling software 83-249
Slingram data processing and profiling programs 83-461
IPFLTR BASIC program for induced polarization data reduction and filtering 83-485
TAYLOR taylor expansion program for level-surface or surface-level continuation of potential-field data 84-501
NLSTIP Nonlinear least-squares inversion of transient induced polarization 84-514
FWDTHZ computation of transient soundings for the time-derivative of Hz near a rectangular loop source on a layered earth 85-270
Exploration -
programs for analysis of lunar geophysical survey data 67-187
GEOPAC 74-1039
* exploration geophysics programs (HP67/97) 78-815
Gravity Studies -
GEOPAC 74-1039
program to compute gravity terrain corrections 77-535
ISOCOMP isostatic residual gravity program 81-574
BASIC programs to calculate gravity/magnetic anomalies for 2 1/2 dimensional prismatic bodies 83-154
FFTFIL filtering program based on 2-dimensional fournier analysis of geophysical data 83-237
HYPERMAG 2-dimensional gravity/magnetic modeling program 83-241
GRAVPOLY 3-dimensional gravity modeling program 83-346
RVT FORTRAN program for an exact elastic solution for tectonic and gravity stresses in isolated symmetric ridges and valleys 84-827
SAKI program for generalized linear inversion of gravity and magnetic profiles 85-122
program for the interpretation of 2-dimensional gravity and magnetic anomalies 85-377
Magnetism -
MAGDEP program for finding depth to basement from total field magnetic profiles 74-1017
GEOPAC 74-1039
FORTRAN IV program for analytic continuation of VLF electro-magnetic data 75-159
REDUC3 documentation of linear filtering of gridded magnetic data 77-784
ADEPT program to estimate depth to magnetic basement 79-367
MQLVTHXYZ Marquardt inversion of mag-field sounding data 80-1159
program for computing magnetic anomaly over topography 81-298
geomagnetic data utility program 81-360
computation of geomagnetic transfer functions 81-361
BASIC programs to calculate gravity/magnetic anomalies for 2 1/2 dimensional prismatic bodies 83-154

Subject — OFR

Geophysics -
Magnetism (continued) -
FFTFIL filtering program based on 2-dimensional fournier analysis of geophysical data 83-237
HYPERMAG interactive, 2-dimensional gravity/magnetic modeling program 83-241
MAGPOLY modification of a 3-dimensional magnetic modelling program 83-345
spectral analysis of aeromagnetic profiles for depth estimation principles, software, and practical application 84-849
MICROMAG A magnetometer data processor for Portable Magnetometer and Apple Microcomputer 85-40
SAKI program for generalized linear inversion of gravity and magnetic profiles 85-122
data processing programs for aerial gamma-ray data 85-359
program for the interpretation of 2-dimensional gravity and magnetic anomalies 85-377
Seismicity -
programs for time and space adaptive deconvolution of single-channel marine seismic-reflection data 73-235
SIPT seismic-refraction inverse modeling program for time-share terminal computer systems 77-365
SIPB seismic-refraction inverse modeling program for batch computer systems 77-366
program for calculating nonlinear seismic ground response 77-671
ARRAY interactive seismic array processing program 78-201
programs for calculating nonlinear seismic ground response in two dimensions 78-287
ISDS interactive seismic display system for displaying and measuring seismic wave forms 79-205
coal-seismic programs for desk top computers (see Coal) 79-242, 80-668, 80-669, 80-670, 83-341, 83-348, 83-350, 84-175, 84-334, 85-226
programs for running median filters and a general despiker 81-1091
documentation/user's guide for interactive spectral analysis and filter program package - seismic reflection data processing 82-744
system for interpreting seismic-refraction arrival-time data using interactive methods 82-1065
HP-85 programs for reading Sprengnether DR-100 seismograph cassettes with DP-100 playback system 83-521
program modifications of OFR 82-1065 83-604
QPLOT interactive plotting program for earthquake/geophysical data 83-621
Stress -
documentation of programs that compute (1) quasi-static tilts in an elastic and viscoelastic material, and (2) surface shear stresses, strains, and shear displacements in a slab 76-484
documentation of programs that compute (1) static tilts for a spatially variable slip distribution, and (2) quasi-static tilts produced by an expanding dislocation loop 76-578
programs to calculate differential stress concentration factors around 2-dimensional inclusions in a plate 77-459
program for calculating stress-intensity factors, stresses, and displacements associated with a fluid-pressurized fracture 78-160

Subject — OFR

Geophysics -
Stress (continued) -
programs for determination of stresses using CSIRO stress cell and USBM borehole deformation gage 82-489
RVT FORTRAN program for an exact elastic solution for tectonic and gravity stresses in isolated symmetric ridges and valleys 84-827
BASIC programs for the determination of in situ stresses using the CSIRO hollow inclusion stress cell 85-509
Torsion -
programs for ground motion studies 76-608
DITT program for data interpretation for torsional tests 79-1463

Image Processing / Computer Graphics -
procedure for computer-graphic processing of mapped linear data 80-353
FENCE program to create files and construct fence sections of borehole data 81-183
LOGIC computer-graphics program to construct integrated logic circuits for genetic-geologic (uranium) models 81-556
application of computer graphics to generate coal resources 82-402
LDIGIT program to digitize graphics data for spatial data analysis - research on uranium models, a progress report, Part V 82-843
GEOPLOT advanced graphics package for minicomputers Part I 83-807A
program for quality control of an image-processing laboratory 84-218
POLYGON program for constructing and editing the geometries of polygons using a color graphics terminal 85-233A
POLYGON (see above), program listing 85-233B

Maps -
weighted triangulation adjustment 69-10
perspective center determination 70-209
general purpose contouring system 75-317
cross-section plotting program for gridded (map) data 76-689
* interpolation program - contour map applications (TI58/59) 80-939
TMPLOT transverse mercator plot program 80-1139
data-reduction programs in planetary altimetry 80-1275
programs to create grid cell, contour, and perspective maps 81-513
CONTUR program to generate contour maps 81-761
CTRL2D program for control in contour mapping 81-1152
user's manual for rassmp 82-623
CONTOUR modification of OFR 75-317 82-797
WELLMAP computer program for the generation of well maps 83-155
transformation of mapped data to grid systems (earthquake applications 83-248
WILDMAP program for plotting digital boundaries and mineral locations for the assessment of resources 84-651

Marine-Offshore -
programs for time/space adaptive deconvolution of single-channel marine seismic-reflection data 73-235
DEROCS development of OCS energy resources 77-130
system for logging, annotating, tabulating, and plotting marine geophysical and geological data 78-288

Subject	OFR
Marine-Offshore (continued) -	
documentation/user's guide to USGS oilspill risk analysis model	81-316
NAVED interactive navigation editor program	81-1167
software listings and electronic circuits and components of the Ocean Bottom Instrument Package (OBIP)	84-267
Mineral and Energy Resources -	
program to compute oil shale thickness, average value, and resource from Fischer assay data	75-110
program to draw bar graphs from oil shale Fischer assay or saline mineral data	75-341
program to draw a ternary diagram based on proportions of any three variables from oil-shale Fischer assay or saline mineral data	75-524
algorithm for commodity reserves analysis using assayed cores	76-867
GOGEODATA computer applications in mineral resources	78-865
program to contour and plot data from helium surveys	79-865
FENCE program to create files and construct fence sections of borehole data	81-183
programs to retrieve, edit, and list sample data for the Eastern Gas Shales Project	81-240
LOGIC computer graphic program to construct integrated logic circuits for genetic-geologic (uranium) models	81-556
LDIGIT program to digitize graphics data for spatial analysis (research on uranium resource models, progress report, Part V)	82-843
WELLMAP program for generation of maps of specified geographic areas to geographic areas to depict the current status of oil and gas	83-155
MIRA system user's manual	83-424
mu**PROSPECTOR** Consultant System, user's manual	83-804
program directory for petroleum assessment of wilderness lands in the western United States	84-275
WILDMAP program for plotting digital boundaries and mineral locations for a given area's resource assessment	84-651
ENSTA program to calculate orthopyroxene compositions from x-ray data	85-104
FINDER PASCAL program for locating mineral deposits with spatial deposits with spatial information	85-590
Mineralogy -	
mineral X-ray diffraction data - retrieval/plot program	76-404
lab manual - mineral X-ray diffraction data retrieval/plot program	76-407
XRDPLT (plotting program for X-ray diffraction data)	77-53
mineralogy lab user's guide to the **TECO** editing program	82-177
* programs to calculate CIPW norms (TI-59)	82-821
ANORTH program to calculate plagioclase compositions from x-ray data	85-103
MINCLC FORTRAN program for recalculating mineral analyses	85-257
program to convert degrees 20 to interplanar spacings and conversion tables for Cu, Ka_1, Ka_2 and weighted mean radiation	85-455
Paleontology -	
MAGIC programs for paleontologists	80-317

Subject	OFR
Remote Monitoring/Sensing -	
program for analysis of linear features derived from Landsat data	76-605
analog data telemetry system for remote monitoring, version I	79-276
analog data telemetry system for remote monitoring, version II	79-946
REMAPP remote sensing array processing procedures	80-1259
REMAPP (see above) programmer's guide	85-231
Saudi Arabia -	
GEOPAC	74-1039
GENDOC general document file program	80-127
GENADD program for adding to **GENDOC**	80-137
data-reduction programs in planetary altimetry	80-1275
CONTUR program for generating contour maps	81-761
CTRL2D program for control in contour mapping	81-1152
Structural Studies -	
FABSTAT program for axially distributed planar-structural data	81-158
Water -	
program to simulate the salt balance between the north and south parts of Great Salt Lake, Utah	75-131
program to compute aquifer-response coefficients	75-612
program for the calculation of grain-size statistics	77-580
programs for slope profile analysis	78-907
program for simulating geohydologic systems in 3-D	80-421
EXTRACT program to retrieve selected well history control system (WHCS) data	81-29
programs for modeling flow and quality of surface water systems	82-430
program for calculating relative-transmissivity input arrays to aid (ground water flow) model calibration	82-447